



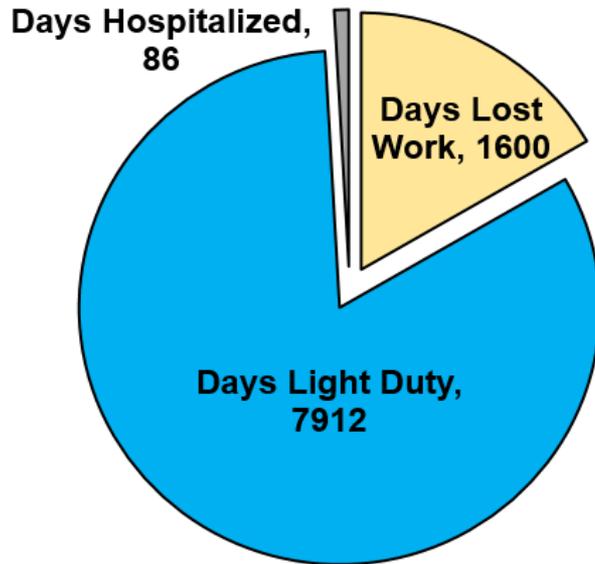
TRAILING HAND TECHNIQUE

Naval Safety Center (Code 32)



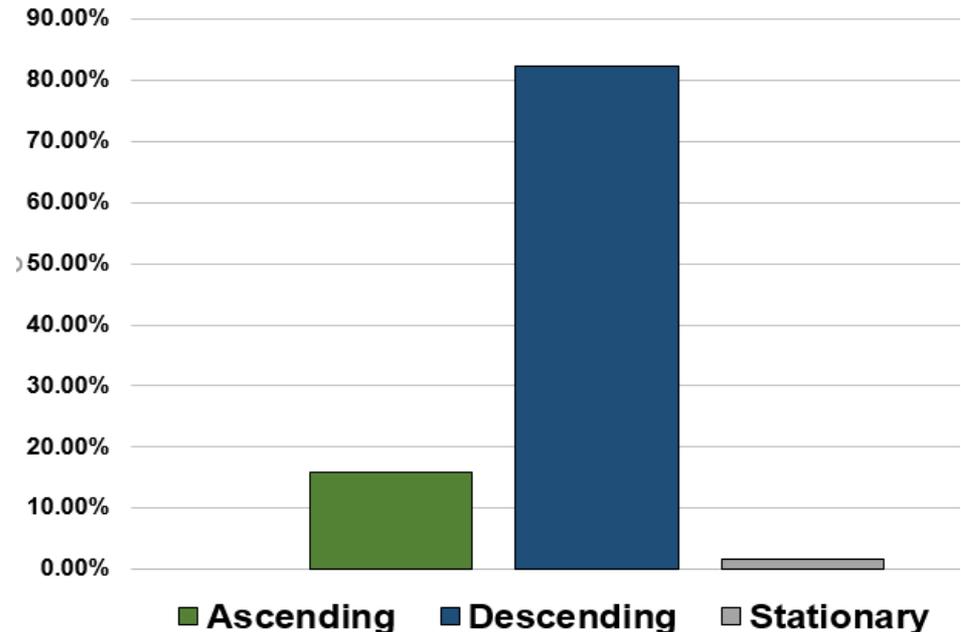
Ladder Falls: The Navy's Most Common Personnel Injury Hazard

From January 2017 to December 2018, nearly **9,600 man-days** were affected by hospitalizations, lost work days, and light duty days caused by ladder related injuries.



Nearly **80% of ladder related injuries occurred while going down ladders** – the techniques introduced in this presentation specifically target **moving down ladders safely!**

Direction of Motion During Ladder Falls on Inclined Ladders



*Preserving Combat
Readiness and Saving Lives*



How do we use the Trailing Hand Technique (THT)?

Sailors working on Naval vessels frequently descend and ascend several ladder wells during a typical day.

Adding to their risk exposure, shipboard ladder wells are narrow and steep. When all of these elements are added to a less than optimal handrail grip, it is easy to see how the chances of injury increase dramatically.

In the pictures we can see a “common” but **unsafe** handrail grips. If you fall down this ladder, using this grip, do you think your wrist or finger tips will be strong enough to prevent you from falling forward? No, probably not!





Using the Trailing Hand Technique (THT)

In most cases, we can't eliminate the risk by not using ladder wells, but we can mitigate it by using a simple technique for holding the handrail while descending ladderwells – **The Trailing Hand Technique.**



The Trailing Hand Technique is:

- **trailing your strongest hand underneath the handrail behind you,**
- **turning** your body slightly **toward that hand** to have more stepping space on each individual ladder rung,
- and **descending** the ladder well in a more **controlled manner.**

What happens if you slip or trip using the THT? Your chances of falling further down the ladder are significantly reduced because your hand grip is in a much stronger position to catch your fall. You are also more likely to fall in a sitting position or towards the rail as well – this will significantly reduce your chances of the severe bruising or strains normally associated with shipboard ladder falls.





Further benefits of “Trailing Hand Technique”



When descending with forward hand grips, boots may not fully engage with surface of step.



Body rotation will rotate feet, allowing more boot tread surface on each ladder rung.





Two Wrongs and a Right



WRONG: This is without a doubt the most **unsafe** way to descend a ladder well! By not holding the handrail or maintaining your feet on the steps (i.e., “ladder sliding”) you are totally exposed to a bad fall.



WRONG: Here you may have some protections but risk serious wrist injury and not being able to prevent a forward fall.



RIGHT! Using the Trailing Hand Technique, will make using ladder wells safer and reduce risk of injury significantly.



Trailing Hand Technique

Questions?



Back Up



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